



**NORTH DAKOTA**  
DEPARTMENT of HEALTH

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MEMO TO : North Dakota Radioactive Material Portable Gauge Licensees

FROM : Terry L. O'Clair, P.E.  
Director  
Division of Air Quality *TL*

RE : NRC Regulatory Issue Summary 2007-28: Security Requirements for Portable Gauges

DATE : January 28, 2008

The North Dakota Department of Health is sending this U.S. Nuclear Regulatory Commission Regulatory Issue Summary (RIS) to portable gauge licensees to increase awareness of the need to secure portable gauges, as specified in 10 CFR 30.34(I).

In accordance with 10 CFR 20.1801, licensees are responsible for the security of stored material. In addition, 10 CFR 20.1802 requires licensees to control and maintain constant surveillance of licensed material that is in a controlled or unrestricted area and that is not in storage. Despite the requirements, between 2001 and 2004 50 gauges were stolen and approximately 50 percent were recovered. About two-thirds of gauges were stolen from vehicles, while being secured in transportation case and locked with a metal chain.

If you have any questions, please contact the North Dakota of Health Radiation Control Program at (701)328-5188.

LR:csc

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
OFFICE OF FEDERAL AND STATE MATERIALS AND  
ENVIRONMENTAL MANAGEMENT PROGRAMS  
WASHINGTON, D.C. 20555

December 7, 2007

**NRC REGULATORY ISSUE SUMMARY 2007- 28**  
**SECURITY REQUIREMENTS FOR PORTABLE GAUGES**

**ADDRESSEES**

U.S. Nuclear Regulatory Commission (NRC) portable gauge licensees and Agreement State Radiation Control Program Directors and Liaison Officers.

**INTENT**

The NRC is issuing this regulatory issue summary (RIS) to portable gauge licensees to increase awareness of the need to secure portable gauges, as specified in 10 CFR 30.34(i), "Security Requirements for Portable Gauges." No specific action or written response is required.

**BACKGROUND**

In accordance with 10 CFR 20.1801, licensees are responsible for the security of stored material. In addition, 10 CFR 20.1802 requires licensees to control and maintain constant surveillance of licensed material that is in a controlled or unrestricted area and that is not in storage. Despite the requirements in 10 CFR 20.1801 and 20.1802, a review of NRC's Nuclear Materials Events Database for the period of 2001 through 2004 revealed that approximately 50 gauges were stolen per year and approximately 50 percent were recovered. Approximately two-thirds of the portable gauges stolen were taken from vehicles. In most cases, the gauge was in its transportation case secured with a locked metal chain. Typically, the chain was cut or the transportation case was broken, and then the device was stolen. Prior to the new requirement in 10 CFR 30.34(i), NRC issued several "Information Notices" (IN-2001-11, IN-98-01, IN-93-18, IN-88-02, IN-87-55, and IN-86-67) to remind licensees of their regulatory responsibility to secure the devices; however, the number of reported thefts was not appreciably reduced.

In order to minimize the number of unauthorized removals of portable gauges by means such as thefts, and to thereby reduce any potential impact to public health and safety, the NRC conducted a rulemaking to amend 10 CFR 30.34, "Terms and Conditions of Licenses," governing the use of byproduct material in specifically licensed portable gauges. On January 12, 2005, the final rule was published in the *Federal Register*, "Security Requirements for Portable Gauges Containing Byproduct Material" (70 FR 2001), which became effective on July 11, 2005. The amendment imposed additional security requirements to reduce the potential for unauthorized removal of portable gauges by means such as theft. Section 30.34(i) was added

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to the regulations to require portable gauge licensees to use a minimum of two independent physical controls that form tangible barriers to secure portable gauges from unauthorized removal, whenever the device is not under the control and constant surveillance of the licensee.

The *Federal Register* notice for the proposed rule (68 FR 45172), August 1, 2003, included examples of acceptable independent physical controls to secure a portable gauge in various scenarios, such as: storage at an authorized location; securing the device in a vehicle; and securing the device at a temporary jobsite or at a location other than an authorized location listed on the license. The licensee has the flexibility in selecting the physical controls to be used in securing a portable gauge.

### **SUMMARY OF ISSUE**

Although the quantity of radioactive material in portable gauges is relatively low, unauthorized removals of these gauges pose potential health and safety and security concerns. In light of the continuing theft of these devices, and expectations to reduce these occurrences, this RIS is being issued to remind licensees of the requirements and responsibilities concerning the security of portable gauges as specified in 10 CFR 30.34(i).

### **BACKFIT DISCUSSION**

This RIS requires no action or written response. Any action on the part of addressees in accordance with the guidance contained in this RIS is strictly voluntary and, therefore, is not a backfit under any regulatory requirement in 10 CFR. Consequently, the staff did not perform a backfit analysis.

### **FEDERAL REGISTER NOTIFICATION**

A notice of opportunity for public comment on this RIS was not published in the *Federal Register* because this RIS is informational, and does not represent a departure from current regulatory requirements.

### **CONGRESSIONAL REVIEW ACT**

This RIS is not a rule as designated by the Congressional Review Act (5 U.S.C §§ 801-886) and therefore, is not subject to the Act.

### **RELATED GENERIC COMMUNICATIONS**

IN 2001-11, "Thefts of Portable Gauges"

IN 1998-01, "Thefts of Portable Gauges"

IN 1993-18, "Portable Moisture-Density Gauge User Responsibilities During Field Operations"

IN 1988-02, "Lost or Stolen Gauges"

IN 1987-55, "Portable Moisture/Density Gauges: Recent Incidents of Portable Gauges Being Stolen or Lost"

IN 1986-67, "Portable Moisture/Density Gauges: Recent Incidents And Common Violations of Requirements For Use, Transportation, and Storage"

#### **PAPERWORK REDUCTION ACT STATEMENT**

This RIS does not contain any information collections and, therefore, is not subject to the requirements of the Paperwork Reduction Act of 1995 (44 U.S.C 3501 et seq.).

#### **CONTACT**

This RIS requires no specific action or written response. If you have any questions, please contact the technical contact listed below or the appropriate regional office.

***/RA/***

Janet R. Schlueter, Director  
Division of Materials Safety  
and State Agreements  
Office of Federal and State Materials  
and Environmental Management Programs

Technical Contact: Kim Lukes, FSME  
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Enclosure: Recently Issued Generic Communications

IN 1987-55, "Portable Moisture/Density Gauges: Recent Incidents of Portable Gauges Being Stolen or Lost"

IN 1986-67, "Portable Moisture/Density Gauges: Recent Incidents And Common Violations of Requirements For Use, Transportation, and Storage"

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Technical Contact: Kim Lukes, FSME  
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Enclosure: List of FSME/NMSS Recently Issued Generic Communications

<b>OFC</b>	FSME/DILR	FSME/DILR	FSME/MSSA	OGC (CRA)	OGC (NLO)
<b>NAME</b>	KLukes	DWhite	AMcIntosh	MBarkman for TRothschild	GMizuno for FCameron
<b>DATE</b>	11/05/07	11/05/07	11/05/07	11/07/07	12/04/07
<b>OFC</b>	OIS	FSME/MSSA			
<b>NAME</b>	TDonnell	JSchlueter			
<b>DATE</b>	11/06/07	12 /07/07			

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List of Issued FSME/NMSS Generic Communications (2007)			
Date	GC No.	Subject	Addressees
02/02/07	IN-07-03	Reportable Medical Events Involving Patients Receiving Dosages of Sodium Iodide Iodine-131 less than the Prescribed Dosage Because of Capsules Remaining in Vials after Administration	All U.S. Nuclear Regulatory Commission medical use licensees and NRC Master Materials Licensees. All Agreement State Radiation Control Program Directors and State Liaison Officers.
02/28/07	IN-07-08	Potential Vulnerabilities of Time-reliant Computer-based Systems Due to Change in Daylight Saving Time Dates	All U. S. Nuclear Regulatory Commission licensees and all Agreement State Radiation Control Program Directors and State Liaison Officers.
03/13/07	IN-07-10	Yttrium-90 Theraspheres® and Sirspheres® Impurities	All U.S. Nuclear Regulatory Commission Medical Licensees and NRC Master Materials Licensees. All Agreement State Radiation Control Program Directors and State Liaison Officers.
04/04/07	IN-07-13	Use of As-Found Conditions to Evaluate Criticality-related Process Upsets at Fuel Cycle Facilities	All licensees authorized to possess a critical mass of special nuclear material.
05/02/07	IN-07-16	Common Violations of the Increased Controls Requirements and Related Guidance Documents	All licensees who are implementing the U.S. Nuclear Regulatory Commission (NRC) Order Imposing Increased Controls (EA-05-090), issued November 14, 2005 and December 22, 2005.
05/21/07	IN-07-19	Fire Protection Equipment Recalls and Counterfeit Notices	All holders of operating licenses for nuclear power reactors and fuel cycle facilities; except those licensees for reactors that have permanently ceased operations and who have certified that fuel has been permanently removed from the reactor vessel; and except those licensees for decommissioned fuel cycle facilities.
06/11/07	IN-07-20	Use of Blank Ammunition	All power reactors, Category I fuel cycle facilities, independent spent fuel storage installations, conversion facility, and gaseous diffusion plants.

Date	GC No.	Subject	Addressees
07/19/07	IN-07-25	Suggestions from the Advisory Committee on the Medical Use of Isotopes For Consideration to Improve Compliance With Sodium Iodide I-131 Written Directive Requirements in 10 CFR 35.40 and Supervision Requirements in 10 CFR 35.27	All U.S. Nuclear Regulatory Commission medical-use licensees and NRC Master Materials Licensees. All Agreement State Radiation Control Program Directors and State Liaison Officers.
08/08/07	IN-07-23	Inadvertent Discharge of Halon 1301 Fire-suppression System from Incorrect and/or Out-of-date Procedures	All holders of operating licenses for nuclear power reactors, except those who have permanently ended operations and have certified that fuel has been permanently removed from the reactor vessel. All holders of licenses for fuel cycle facilities.
08/13/07	IN-07-26	Combustibility of Epoxy Floor Coatings at Commercial Nuclear Power Plants	All holders of operating licenses for nuclear power reactors and fuel cycle facilities except licensees for reactors that have permanently ceased operations and who have certified that fuel has been permanently removed from the reactor vessel.
09/13/07	IN-07-30	Radiological Controls Create Criticality Safety Accident Scenario for Fissile Solution Container Transport at Fuel Cycle Facility	All licensees authorized to possess a critical mass of special nuclear material.
09/28/07	IN-07-33	Exposures To Members Of The Public Caused By Inadequate Controls Over Well Logging Sources	All U.S. Nuclear Regulatory Commission Well Logging Licensees. All Agreement State Radiation Control Program Directors and State Liaison Officers.
10/15/07	IN-07-32	Out-of-Service Equipment Connected to In-service Process Line Results in Fissile Solution Spill at Fuel Cycle Facility	All licensees authorized to possess a critical mass of special nuclear material
10/17/07	IN-07-35	Varian Medical Systems Varisource HDR Events: Iridium-192 Source Pulled From Shielded Position	All U.S. Nuclear Regulatory Commission medical use licensees and NRC Master Materials Licensees authorized to possess or use a Varian Medical Systems VariSource High Dose Rate Remote Afterloader (VariSource HDR). All Agreement State Radiation Control Program Directors and State Liaison Officers.
03/01/07	RIS-07-03	Ionizing Radiation Warning Symbol	All U.S. Nuclear Regulatory Commission licensees and certificate holders. All Radiation Control Program Directors and State Liaison Officers

Date	GC No.	Subject	Addressees
03/09/07	RIS-07-04	Personally Identifiable Information Submitted to the U.S. Nuclear Regulatory Commission	All holders of operating licenses for nuclear power reactors and holders of and applicants for certificates for reactor designs. All licensees, certificate holders, applicants, and other entities subject to regulation by the U.S. Nuclear Regulatory Commission of the use of source, byproduct, and special nuclear material
03/20/07	RIS-07-05	Status and Plans for Implementation of NRC Regulatory Authority for Certain Naturally-occurring and Accelerator-produced Radioactive Material	All NRC materials licensees, Radiation Control Program Directors, State Liaison Officers, and NRC's Advisory Committee on the Medical Uses of Isotopes
04/05/07	RIS-07-07	Clarification of Increased Controls for Licensees That Possess Collocated Radioactive Material During Transportation Activities	All U.S. Nuclear Regulatory Commission licensees issued NRC's Order Imposing Increased Controls and all Radiation Control Program Directors and State Liaison Officers
05/04/07	RIS-07-09	Examples of Recurring Requests for Additional Information (RAIs) for 10 CFR Part 71 and 72 Applications	All holders of, and applicants for, a: (1) 10 CFR Part 71 certificate of compliance (CoC) for a radioactive material transportation package; (2) 10 CFR Part 72 CoC for a spent fuel storage cask; and (3) 10 CFR Part 72 specific license for an independent spent fuel storage installation (ISFSI).
06/27/07	RIS-06-27, Suppl. 1	Availability of NRC 313A Series of Forms and Guidance for Their Completion	All U.S. Nuclear Regulatory Commission medical-use licensees and NRC Master Materials licensees. All Radiation Control Program Directors and State Liaison Officers.
05/15/07	RIS-07-10	Subscriptions To New List Server For Automatic Notifications Of Medical-Related Generic Communications, Federal Register Notices And Newsletters	All U.S. Nuclear Regulatory Commission medical-use licensees and NRC Master Materials licensees. All Radiation Control Program Directors and State Liaison Officers.



Date	GC No.	Subject	Addressees
08/31/07	RIS-07-13	Verification of the Authenticity of Materials Possession Licenses	All U.S. Nuclear Regulatory Commission materials licensees. All Agreement State Radiation Control Program Directors and State Liaison Officers.
09/07/07	RIS-07-18	Data for Updating the Interim Inventory of Radioactive Sources	All U.S. Nuclear Regulatory Commission Part 40, Part 50, Part 70, Part 72, and Part 76 licensees and certificate holders who are authorized to possess sources of radioactive material at the Category "3.5" (as defined below) activity or higher.
10/04/07	RIS-07-22	Status Update For Implementation Of Nrc Regulatory Authority for Certain Naturally-Occurring and Accelerator-Produced Radioactive Material	All U.S. Nuclear Regulatory Commission materials licensees, radiation control program directors, State liaison officers, and the NRC's Advisory Committee on the Medical Uses of Isotopes.
10/04/07	RIS-07-23	Date For Operation Of National Source Tracking System	All licensees authorized to possess Category 1 or Category 2 quantities of radioactive materials. All Radiation Control Program Directors and State Liaison Officers.

Note: A full listing of generic communications may be viewed at the NRC public website at the following address:  
<http://www.nrc.gov/reading-rm/doc-collections/gen-comm/index.html>